

Quarterly Report to the Minister of  
Research, Science and Innovation

For the first quarter ending 30 September 2018

# Introduction

This report provides an update of performance for the first quarter of the 2018/19 financial year. Each quarterly report contains:

- progress against the performance measures in our Statement of Performance Expectations 1 July 2018 – 30 June 2019
- financial performance
- update on significant projects and
- significant risks or issues that may impact performance.

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## Executive Summary

### Our highlights this quarter:

- In the 12 months to 30 September 2018 we worked with 2,593 organisations to provide services including programmes, events, international missions and grants, with a Net Promoter Score of +53.
- Significant progress at Gracefield including:
  - Completed and presented to Government the Gracefield Innovation Quarter (GIQ) Programme Business Case. This business case addresses the duty of care and health and safety issues, as well as developing a long-term vision for the site.
  - Others key areas of progress include board sign off on the detailed business case for new MSL building, meaning construction starts in October. The repairs work on Robertson Roof (phase 1) completed. Māori Economy Hub, which suffered severe storm issues now has a new roof and internal repairs complete. The foxpit upgrade (deals with Glycoyn Waste) now complete.
- The year to date operating surplus of \$2.4m is ahead of budget in the first quarter due to higher commercial and other revenue and lower expenses. Lower expenditure is timing, the favourable variance will reverse as the year progresses.
- Because of the new research and development tax incentive, the growth grants forecast has been updated and we are forecasting a spend of \$921.0m (underspend of \$69.4m).
- We are on track to achieve 14 out of 18 performance measures. We have partially achieved four however are confident that measures underway to improve our customers' experience of our services will positively impact these measures.
- Other key points of progress during the quarter include:
  - Board signed off Social Enterprise Strategy, confirming that innovation and tech based social enterprises do fall within Callaghan Innovations' mandate.
  - Digital Strategy developed and socialised internally, with Digital Advisory Committee (external) as well as the likes of DIA. Focus moves to implementation.
  - NZFIN strategy developed in consultation with other key stakeholders.
  - Held the inaugural Southern Saas event with 250+ delegates.
  - Developed first draft of the RTS strategy.

### Our focus next quarter:

- Working with customers, key influencers, innovative businesses and partner organisations to build customer profiles for, Scale-Up New Zealand, ahead of its launch in early 2019.
- Implementing our bold Digital Strategy including picking implementation partner for Google G-Suite implementation, upgrading CRM system to the cloud, implementing new payroll software solution, implementing e-sign capabilities, updating our cyber and physical security programme, moving towards single sign on and improvement to our network and Wi-Fi infrastructure.
- Complete the Research and Technical Services (RTS) strategy that clarifies where RTS sits in the innovation ecosystem, for Board approval next quarter.
- Working with the Ministry of Business, Innovation and Employment and Inland Revenue to implement the R&D tax incentive, including communications and second phase of policy work.
- Kicking off our customer journey initiative with persona work due in the next quarter.
- Board business case sign off for new Auckland location.
- And finally, the following deliverables for our Gracefield site:
  - Start the construction of our new MSL building (Emergency Response Works). We will also work to confirm the final internal fit out design.
  - Asbestos removal from our current MacKay building due to end of life protection system. This will include moving the time function into a new home in Gracefield.
  - Glycosyn lab reinstatement complete (post fire damage several years ago).
  - Solution developed for Glycosyn Inwards Good store to address compliance and audit issues.
  - After significant air conditioning issues last summer, we will complete an upgrade programme to a range of our HVAC systems in the next quarter.

# Our Strategy



## Strategic Initiatives for 2018/19

<b>Strategic Pillar</b>	<b>#</b>	<b>Initiative</b>
<b>Build the critical foundations</b>	1	Develop funding strategy
	2	Deliver digital architecture and innovation process
	3	Develop leadership capability and talent
	4	Cyber-security initiatives delivered
	5	Gracefield reinvigoration
<b>Show the Future</b>	6	NZ Futures, impact and modelling capability
<b>Fuel Demand</b>	7	RTS role and strategy defined
<b>Connect the system</b>	8	Super connector platform delivered
<b>Empower innovators</b>	9	Successful R&D tax credit migration plan agreed
	10	Customer segmentation / portfolio models implemented

# Progress Report

## Show the Future

**Show New Zealand where technology is taking the world, how we must adapt, and how innovation drives success.**

Our highlights this quarter

- Supported the successful 'Future of the Future' event in Auckland where key design executives from the world's most disruptive brands, including Google, Facebook, Netflix, AirBnB, Uber and Spotify, shared their knowledge about the digital evolution and how it will influence and change the future of work. 30 customers attended the Future of the Future event.
- Hosted 40 students from the Hutt City Council's Innovative Young Minds Programme at Gracefield, designed to encourage young women to explore science, technology, maths and high-tech manufacturing (STEMM) careers.
- Our GM Strategy delivered a keynote address at the Canterbury Tech Summit to over 700 tech industry leaders challenging New Zealand businesses to accelerate innovation and how to be successful in this changing environment.

Our focus for the next quarter

- Promote the findings from the 'Innovation Challenge' to challenge business leaders to look beyond the business-as-usual horizon and towards longer term strategies fuelled by innovation and emerging technologies. The Innovation Challenge helped form a collective vision that will provide a catalyst to bring the innovation ecosystem together.
- Provide thought leadership with a series of articles and presentations from our experts providing insights in a variety of areas of interest to New Zealand businesses including space, smart packaging and Industry 4.0.

## Fuel Demand

**Be an exemplar for innovation and a voice for innovators. Showcase innovation as a pathway to success.**

Our highlights this quarter

- Developed our Environmental Innovation Programme, a multi-year programme of work to support environmental innovation with a range of activities and programmes (subject to Budget bid). The programme focuses on three specific theme areas: stable climate, clean water and savvy resource use. It will be launched in 2019.
- The Measurement Standards Laboratory achieved international acceptance for a range of improved length measurement capabilities following a rigorous international peer review process, enabling it to provide more accurate services to New Zealand manufacturers.
- Developing the Research and Technical Services (RTS) Strategy that clearly identified the role of RTS which is focused primarily on development and commercialisation where relevant. RTS:
  - de-risks R&D for customers;
  - helps reduce the cost and improves speed to market via access to shared expertise and infrastructure;
  - prototypes, develops, tests and integrated ideas into a product / service that can be delivered at scale; and
  - connects industry to experts and collaborators in the science and R&D system.

Our focus for the next quarter

- Following a positive discussion on the draft RTS Strategy with the Board in October and receiving agreement to continue to develop the strategy along the lines proposed, the final RTS Strategy will be developed and go to the Board for approval in December.
- Supporting the Agritech New Zealand Roadshow visiting eight centres across New Zealand in October. The events will provide insights into innovative and developing local and offshore initiatives, and businesses will learn how Callaghan Innovation can support their research and development.

## Connect the Ecosystem

**Actively connect people, opportunities and networks. Collaborate to remove friction.**

Our highlights this quarter

- Hosted our first Software as a Services (SaaS) 2-day conference in New Zealand 'Southern SaaS' for over 250 SaaS founders and leaders. The conference supported the growing network of the New Zealand SaaS community and was designed to enable businesses to scale faster.
- Leading the 2018 Agritech Silicon Valley mission, where, in partnership with Agritech and with support from NZTE, 30 agriculture innovators travelled to the United States. The trip included exploring US farms and innovation facilities and attending an international conference. Agritech NZ signed two deals opening doors for Kiwi firms in the US.

Our focus for the next quarter

- Our super connector platform, Scale-Up New Zealand, will move from a detailed planning stage to focus on working with our managed customers, key influencers and partner organisations to have profiles loaded on the platform. We are aiming to have at least 300 customer profiles on the platform by the end of this year. We remain on track for its launch early 2019.
- Leading a delegation of over 30 Māori business leaders to Ireland and the United Kingdom in November, as part of the Te Tira Toi Whakangao (T<sup>3</sup>W) programme. T<sup>3</sup>W is a joint initiative between Callaghan Innovation and NZTE designed to support and grow Māori technology businesses.
- The Measurement Standards Laboratory will partner with the Ministry for Culture and Heritage to commemorate the 150th anniversary of standard time at a public event on 1 November 2018. Speakers at the event include historian Gerard Morris and Dr Bruce Warrington, Chief Metrologist and CEO of the National Measurement Institute, Australia.

## Empower Innovators

**Be a partner – offer the right service and funding at the right time for greatest impact.**

Our highlights this quarter

- Confirmed the final policy design of the R&D Tax Incentive with the Ministry of Business, Innovation and Employment and Inland Revenue ahead of the public announcement and introduction of Legislation in October 2018.
- Hosted an event with UK-based customer success guru Dan Steinman, attended by 90 Callaghan Innovation digital and Software as a Service (SaaS) customers. Dan shared his experience growing the discipline of customer success over his career.

#### Our focus for the next quarter

- Work with the Ministry of Business, Innovation and Employment and Inland Revenue on the implementation the R&D tax incentive, including communicating with customers about their grant funding arrangements and the second phase of policy work.
- Building on the work underway to better understand our customers. We will be developing customer personas, so we can better serve our customers and what they need as well as understand the current innovators' journey through the innovation ecosystem.

## Build the critical foundations

### Foundation initiatives to drive our ambition.

#### Our highlights this quarter

- Completed and presented to Government the Gracefield Innovation Quarter (GIQ) Programme Business Case. The programme business case outlines the long-term vision to make GIQ a world-class innovation hub.
- In the 2018/19 year Callaghan Innovation is running with a \$5 million deficit. This quarter we have developed our funding strategy to assess options to return to a balanced budget in 2019/20. This work identified that Callaghan Innovation is facing a number of significant cost pressures, such as increased maintenance costs at Gracefield, and increased insurance and depreciation. We are also anticipating increased demand for our services as a result of the R&D tax incentive and have identified a number of areas of unmet demand for innovation support services that will support progress towards the Government's target to raise total expenditure on R&D to 2 percent. As a result, our Board has agreed that we will work with the Ministry of Business, Innovation and Employment to seek additional funding for cost pressures and for new initiatives at Budget 2019.
- Following a thorough selection process, selecting Google's G Suite – part of our work to update our productivity suite under our new Digital Strategy. This aims to enable a truly digital way of working, empowering our people so they can add value faster to more businesses than ever. Next, we will select an implementation partner and anticipate rolling out this in early-mid 2019.
- Supporting our people leaders to develop their leadership and management skills with over 40 people attending coaching for performance improvement and professional development coaching workshops. In addition we identified a number of staff for accelerated development through our refreshed approach to managing and nurturing talent.

#### Our focus for the next quarter

- Implementing our bold Digital Strategy including picking implementation partner for Google G-Suite implementation, upgrading CRM system to the cloud, implementing new payroll software solution, implementing e-sign capabilities, updating our cyber and physical security programme, moving towards single sign on and improvement to our network and Wi-Fi infrastructure. Alongside this we are also implementing a number of process improvement initiatives.
- Constructing the new, purpose-built facility for the Measurement Standards Laboratory following the building consent and resource consent being received and continuing with the other emergency response works underway at Gracefield.
- Continue to implement our Leadership Capability Roadmap that identifies the increased need for our leaders to translate strategy, model values aligned behaviour, lead and achieve results through collaborative teams and actively manage underperformance and/or misaligned behaviours. We will focus on refreshing our competency framework and optimisation of our leadership development channels. We will also implement Emotional Intelligence and Story Telling development courses for all our people leaders.

# Performance Measures

## Callaghan Innovation Operations: Multi-Category Appropriation

Performance measure	2018/19 Performance Standard	12 months to end Q1 FY 18/19	Status
Total number of organisations working with Callaghan Innovation on services this Financial Year	2600	2593	
Net Promoter Score of all surveyed customers	+60	+53	
Total number of organisations working with Callaghan Innovation and NZTE as a F700 customer	300	657	

Callaghan Innovation is focused on improving our customers' experience engaging with us. Detail is provided below on initiatives underway to improve our Net Promoter Score.

### Category 1: Building Business Innovation

Performance measure	2018/19 Performance Standard	12 months to end Q1 FY 18/19	Status
Number of organisations working with Callaghan Innovation in the following services: <ul style="list-style-type: none"> <li>• Programmes</li> <li>• Events</li> <li>• International Missions</li> <li>• Global expert</li> </ul>	1500	1196	
Net Promoter Score for Callaghan Innovation Services: <ul style="list-style-type: none"> <li>• Programmes</li> <li>• Events</li> <li>• International Missions</li> <li>• Global expert</li> </ul>	+50	+42	

Following a ten percent increase in the number of businesses we worked with in 2017/18, we are focused on deepening our engagement with our customers who are increasingly using more than one of our services.

Our event activity has increased as our experiences become a platform to connect, communicate and strengthen our brand and reputation with customers and stakeholders. We are implementing a number of initiatives to drive an increase in our Net Promoter Score for our events, including an extensive events guide to support staff training, investing in event management software, and providing more focused and effective event marketing and communications.

## Category 2: Business Research and Development Contract Management

Performance measure	2018/19 Performance Standard	Progress to end of Q1	Status
Percentage of growth, project and student fellowship applications who have received a decision within 30 working days of receipt of the completed application	90%	85.8%	

## Category 3: Research and Development Services and Facilities for Business and Industry

Performance measure	2018/19 Performance Standard	Progress to end of Q1	Status
Number of New Zealand organisations with a research and technical service project this financial year (excluding commercial group)	175	269 <sup>1</sup>	
Total commercial revenue from Research and Technical Services (excluding commercial group)	\$8.9 million	\$2.1 million	
Total commercial revenue for the Commercial Group (excluding Research and Technical Services)	\$12.6 million	\$4.7 million	
Net Promoter Score from Research and Technical Services, services (excluding commercial group)	+60	+47	

The work underway by the Research and Technical Services (RTS) Group to develop its new Strategy and reorganise its customer engagement process is expected to positively impact RTS' Net Promoter Score.

## National Measurement Standards

Performance measure	2018/19 Performance Standard	Progress to end of Q1	Status
Provision of national measurements and standards and related services in accordance with statutory obligations under section 4 of the Measurement Standards Act 1992, reported annually to the Minister and accepted	Achieved	In progress	
All technical procedures related to the maintenance of national measurement standards (in accordance with the resolutions and recommendations of the Metre Convention) independently reviewed and validated, with all external review actions completed by 30 June 2018	Achieved	In progress  There were 102 technical procedures in validation on 1 Oct 2018 of which 6 were validated or revalidated during the three months from 1 July 2018 to 30 Sept 2018.  IANZ, assisted by Dr Erkki Ikonen from the Finnish national metrology institute, conducted a routine	

<sup>1</sup> 12 months to end Q1 FY 18/19

		reassessment of MSL's Photometry and Radiometry section on 20-22 August 2018. No corrective action requests were raised during the audit.	
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## Research and Development Growth Grants

Performance measure	2018/19 Performance Standard	Progress to end of Q1	Status
Percentage of businesses receiving a Growth Grant that maintain or increase eligible R&D expenditure over the grant period <sup>2</sup>	70%	87%	

## Targeted Business Research and Development Funding

Performance measure	2018/19 Performance Standard	Progress to end of Q1	Status
Percentage of businesses completing research and development project grants that positively rate Callaghan Innovation's assistance as valuable in their final reports	80%	91.4%	
Percentage of surveyed recipients who would recommend the R&D Experience Grants to others <sup>3</sup>	80%	Results will be available at year end	
Percentage stating that grant enabled them to improve or accelerate their research and development	90%	97.8%	

## Repayable Grants for Start-ups

Performance measure	2018/19 Performance Standard	Progress to end of Q1	Status
Percentage of incubator contracts that are assessed as delivering as required (founder focused, and technology focused) <sup>4</sup>	90%	Results will be available at year end	
Percentage of surveyed start-ups who agree that they have gained business or commercialisation skills due to working with the incubator/accelerator	60%	Results will be available at year end	

<sup>2</sup> This compares the average eligible quarterly R&D spend in the two years prior to the Growth Grant (the years used to enter the scheme) with the average eligible quarterly R&D spend during the Growth Grant period. Note: the wording about eligible R&D spend being maintained or increased has changed in the latest Ministerial direction. It was previously 'the business has maintained or increased non-government funded eligible R&D expenditure over the two years of the grant period as compared to the two years prior to the grant period'. It is currently 'has maintained or increased eligible R&D expenditure over the two years of the grant period as compared to the two years prior to the grant period'.

<sup>3</sup> Surveyed recipients are companies that found a student and students who identified as working on the company projects.

<sup>4</sup> Callaghan Innovation will be assessing the contracts as meeting the reporting requirements which were agreed between us and the incubators

# Financial Performance

## Financial Summary

### Key Financial Indicators to 30 September 2018

	<b>Actual \$m</b>	<b>Budget \$m</b>	<b>Variance \$m</b>
Group Surplus after non-operating items	2.4	(0.6)	3.0
Revenue	28.3	27.3	1.0
Expenses	26.1	28.1	2.0
Interest income and non-operating items	0.2	0.2	0.0
Cash and deposits	26.9	24.3	2.6

The operating surplus for the three months ended 30 September 2018 was \$2.2m compared to a budgeted operating loss of (\$0.6m). After including non-operating items consisting of share of surplus from Associate (\$0.1m) and interest income \$0.3m the total Group Surplus for the three months period is \$2.4m.

Total revenue was higher than budget \$1.0m. The favourable revenue variance is due to favourable overseas commercial revenue \$0.6m and other income \$0.4m. Other income includes higher than planned rental income, 0.3m. Overseas commercial revenue is favourable to budget due to work completed by Glycosyn for overseas clients including Kifunensine product sales and fee for service work.

The favourable expenditure variance of \$2.0m is due to an under spend on Personnel \$0.5m which is expected to be timing and reverse as the year progresses, Services and Contracts are favourable \$0.4m (higher transfers to work in progress, will reverse as work during the year as work is completed for clients) and other costs \$0.5m favourable (lower spend on strategic initiatives \$0.9m which will reverse as the year progresses).

The cash balance at 30 September totalled \$26.9m which is \$2.5m higher than budget. The higher cash balance figure is due to below budget capital expenditure in the first quarter as reflected in the lower cash outflow in investing activities of \$3.9m below plan.

All output classes at 30 September 2018 were ahead of the year to date 2019 budget.

Grants expenditure for the three months was \$57.1m. Full year (2019) planned grant expenditure is \$212.9m.

Interest income is \$0.1m ahead of budget reflecting higher than budgeted cash balances and year to date share of associate company loss is \$(0.1)m.

## Statement of Comprehensive Revenue and Expenses

For the three months ended 30 September 2018

\$000	Group			Full Year
Revenue	Actual	Budget	Variance	Budget
Crown operating:				
Other departmental transfers	845	845	-	3,378
Callaghan Innovation Funding	7,500	7,500	-	30,000
Strategic Investment	4,630	4,630	-	18,523
Business R&D Grants administration	1,935	1,938	(3)	7,751
National Measurement Standards	1,767	1,757	10	7,069
<b>Total Crown operating</b>	<b>16,677</b>	<b>16,670</b>	<b>7</b>	<b>66,721</b>
Crown contestable contracts and other	3,760	3,590	170	12,487
<b>Commercial revenue</b>				
Domestic commercial	2,026	2,250	(224)	9,062
Overseas commercial	4,794	4,186	608	12,463
	6,820	6,436	384	21,525
Other income	1,076	678	398	2,420
<b>Total revenue</b>	<b>28,333</b>	<b>27,374</b>	<b>959</b>	<b>103,153</b>
<b>Expenses</b>				
Personnel	12,084	12,569	485	48,583
Services and contracts	6,310	6,735	425	24,792
Other costs	5,931	6,804	873	26,914
Depreciation	1,767	2,033	266	8,636
<b>Total expenses</b>	<b>26,092</b>	<b>28,141</b>	<b>2,049</b>	<b>108,925</b>
<b>Operating (deficit)</b>	<b>2,241</b>	<b>(767)</b>	<b>3,008</b>	<b>(5,772)</b>
Finance Income	(270)	(198)	72	(765)
Non operating items	102	-	(102)	-
<b>Net surplus</b>	<b>2,409</b>	<b>(569)</b>	<b>2,978</b>	<b>(5,007)</b>

The following grants funding and expenditure occurred in the three months ended 30 September 2018:

	\$000
Grants funding from MBIE	57,127
Grant expenditure	(57,127)
Net impact	-

## Statement of financial position

As at 30 September 2018				
\$000	Actual	Group Budget	Variance	Full Year Budget
<b>ASSETS</b>				
Current assets*	138,341	106,264	32,077	93,793
Non-current assets				
Fixed Assets	49,024	56,199	(7,175)	72,234
Investment in associates	9,226	8,871	355	8,871
<b>Total assets</b>	<b>196,591</b>	<b>171,334</b>	<b>25,257</b>	<b>174,898</b>
<b>Liabilities</b>				
Current liabilities*	(120,238)	(96,759)	23,479	(94,770)
Non current liabilities:				
Non current employee entitlements	(432)	(433)	(1)	(423)
<b>Total liabilities</b>	<b>(120,670)</b>	<b>(97,192)</b>	<b>23,478</b>	<b>(95,193)</b>
<b>Net assets</b>	<b>75,921</b>	<b>74,142</b>	<b>1,779</b>	<b>79,705</b>

## Statement of equity

As at 30 September 2018

As at 30 September 2018				
\$(000)	Actual	Full Year Budget	Variance	Full Year Budget
<b>Equity</b>				
Capital	73,512	74,711	(1,199)	84,712
Current year surplus (deficit)	2,409	(569)	2,978	(5,007)
<b>Total equity</b>	<b>75,921</b>	<b>74,142</b>	<b>1,779</b>	<b>79,705</b>

\* includes the following estimated grants liability at 30 September 2018:

### Current assets

MBIE grants receivable 102,779

### Current Liabilities

Provision for grants payable (102,779)

**Statement of cash flow**

<b>For the three months ended 30 September 2018</b>				
<b>\$000</b>	<b>Actual</b>	<b>Group Budget</b>	<b>Variance</b>	<b>Full Year Budget</b>
<b>Net cash flows from:</b>				
Operating activities	2,199	630	1,569	2,518
Investing activities	(3,380)	(7,314)	3,934	(29,951)
Financing activities	-	-	-	10,000
<b>Net increase / (decrease)</b>	<b>(1,181)</b>	<b>(6,684)</b>	<b>5,503</b>	<b>(17,433)</b>
Add cash at start of period	28,061	31,016	(2,955)	31,016
<b>Balance at end of period</b>	<b>26,880</b>	<b>24,332</b>	<b>2,548</b>	<b>13,583</b>

**Reconciliation: statement of service performance to statement of comprehensive income**

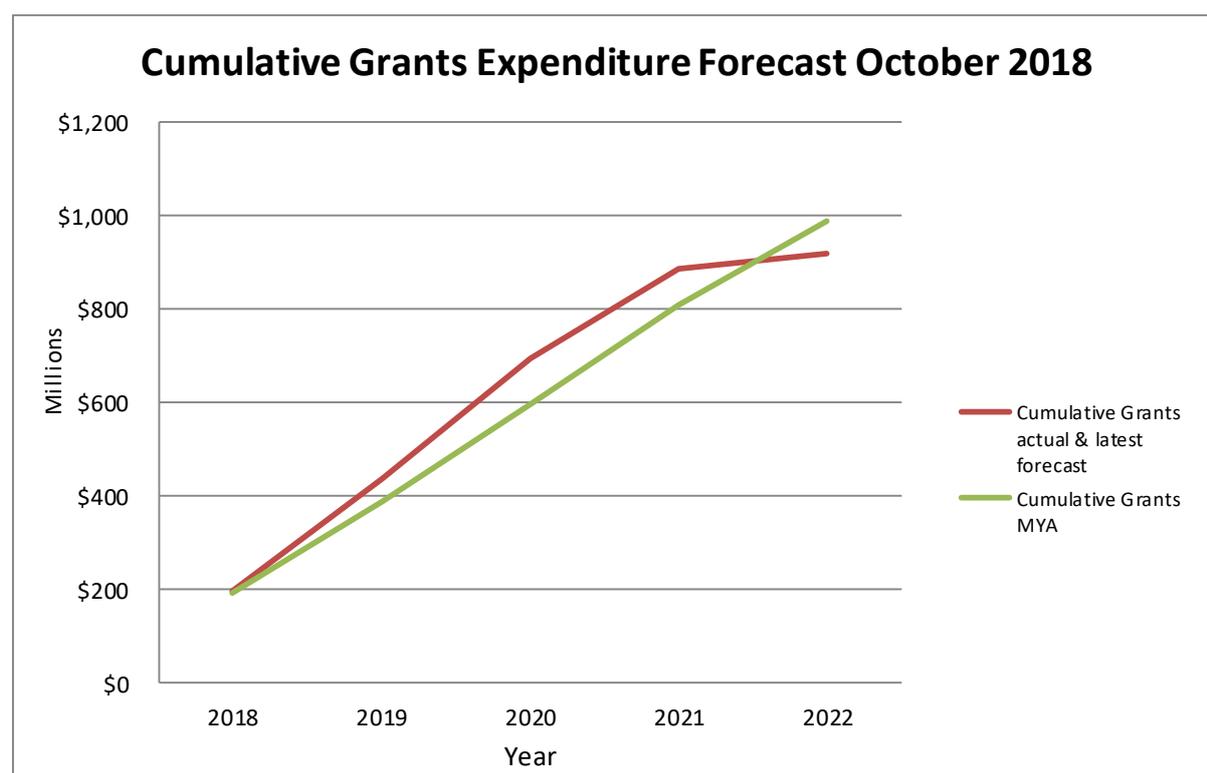
<b>For the three months ended 30 September 2018</b>				
<b>\$000</b>	<b>Actual</b>	<b>Budget</b>	<b>Variance</b>	<b>Full Year Budget</b>
<b>Statement of service performance:</b>				
Output class: Building Business Innovation	1745	1,022	723	4,313
Output class: Research and Development Services	1051	(597)	1,648	(5,610)
Output class: Business Research and Development Contract Management	(384)	(973)	589	(3,779)
Output class: National measurement standards	151	(23)	174	67
<b>Total crown operating funding</b>	<b>2563</b>	<b>(571)</b>	<b>3,134</b>	<b>(5,009)</b>
Non operating items	(154)	2	(156)	2
	<b>2409</b>	<b>(569)</b>	<b>2,978</b>	<b>(5,007)</b>

## Appendices

### Grants Forecast

#### Executive Summary

The Grants multi-year appropriation (MYA) announced at the May 2017 Budget was for \$990.4m over 5 years. This MYA runs from 1 July 2017 to 30 June 2022. The growth grants forecast has been updated to take into account the new tax incentive transition rules which states no new grants approved post 31 March 2019 and existing grants extended to 31 March 2021. As a result, we are forecasting a spend of \$921.0m (underspend of \$69.4m). For a further breakdown of these numbers see the Growth, and Project and Students Grants sections below.



#### Growth Grants

##### Multi-year appropriation period from 2017/18 to 2021/22

A multi-year appropriation (MYA) of \$822.9m (\$802.9m + \$20m for 2017/18 OBU adjustments) was established to fund R&D Growth Grants over the five-year period 2017/18 to 2021/22.

The demand for growth grants continues to be strong with nearly 100 new growth grants added at an average value of over \$1m each in the last 12 months. Looking forward the forecast for growth grants has been set at 10 new approvals per month with an average value of \$1.2m through to March 2019 after which no new growth grants can be approved.

This forecast takes into account the new tax incentive transition rules, and has forecasted 60 new Growth Grants between now and 31 March 2019. However, this may increase due to a growing amount of applications being commenced. More certainty can be provided at the next quarterly report when applications have been submitted for review, and the applications for new Growth Grants have closed.

Table 1 shows forecast demand for R&D growth grants over the same five-year appropriation period is \$767.7m. This results in a forecasted underspend of \$55.1m.

**Table 1: Forecast demand for R&D Growth Grants for the appropriation period**

	2017/18	2018/19	2019/20	2020/21	2021/22	Total
	\$m	\$m	\$m	\$m	\$m	\$m
Forecasts provided by the 339 firms with existing contracts <sup>1</sup>	172.3	152.4	91.3	28.4	0.0	444.4
Renewal of existing Growth Grant contracts <sup>2</sup>	0.0	53.6	118.0	121.9	0.0	293.5
Drop Out Factor 5%	0.0	(10.3)	(10.5)	(7.5)	0.0	(28.3)
Estimated Cost of 60 new applicants <sup>3</sup>	0.0	15.3	24.5	18.3	0.0	58.1
<b>Total forecast demand for R&amp;D Growth Grants</b>	<b>172.3</b>	<b>211.0</b>	<b>223.4</b>	<b>161.1</b>	<b>0.0</b>	<b>767.7</b>
MYA before Cost Pressure Factored In	145.7	145.6	145.6	145.6	145.6	728.2
Cost Pressure - additional MYA	8.2	15.7	23.6	27.2	0.0	74.6
Updated MYA (as per Bud 2017)	153.9	161.4	169.2	172.8	145.6	802.9
OBU 2017 Adjustments	5.0	5.0	5.0	5.0	0.0	20.0
Additional MYA carried over from 2016/17						0.0
Updated MYA	158.9	166.4	174.2	177.8	145.6	822.9
Underspend against updated MYA	(13.4)	(44.6)	(49.2)	16.7	145.6	55.1

Notes

1. Based on approved and signed contracts to 30 September 2018.
2. Cost of Growth Grants renewals assumes that businesses maintain their current level of R&D expenditure.
3. Takes into account new tax incentive transition rules which states no new grants approved post 31 March 2019 and existing grants extended to 31 March 2021.

## Project and Student Grants

**Table 2: Forecast spending on R&D Project and R&D Student Grants for the appropriation period**

	2017/18	2018/19	2019/20	2020/21	2021/22	Total
	Acts	Fcast	Fcast	Fcast	Fcast	
	\$m	\$m	\$m	\$m	\$m	\$m
Estimated amount already committed to in existing contracts	24.6	23.0	3.3	0.7	0.0	51.6
Estimated cost of new contracts	0.0	7.0	29.3	32.3	33.1	101.6
<b>Total forecast spending on R&amp;D Project and R&amp;D Student Grants</b>	<b>24.6</b>	<b>30.0</b>	<b>32.6</b>	<b>33.0</b>	<b>33.1</b>	<b>153.3</b>
Multi-year appropriation for R&D Project and R&D Student Grants	<b>Total 2017/18 to 2021/22 (Updated MYA)</b>					167.5
<b>Potential Savings</b>						<b>14.2</b>

A multi-year appropriation (MYA) of \$167.5m (\$187.5m less \$20m for 2017/18 OBU adjustments) was established to fund R&D Project and R&D Student Grants over the five-year period 2017/18 to 2021/22.

The latest forecast out until 2021/22 is indicative of a steady increase in demand for Project & Student grants in 2018/19 pushed by increased engagement with companies by the Callaghan Innovation Sector Teams. This is reflected in the table above which shows \$23.0m in project and student grants commitments for 2018/19 as at 30 September 2018.

It is estimated that about \$51.6m of R&D Project and R&D Student grants (31% of the \$167.5m multi-year appropriation) has been committed in existing contracts (see table 3 below). This is based on the latest payment data available.

**Table 3: Estimated amount committed to existing contracts as at 30 September 2018**

	2017/18	2018/19	2019/20	2020/21	2021/22	Total
	Act	Fcast	Fcast	Fcast	Fcast	
	\$m	\$m	\$m	\$m	\$m	\$m
R&D Project Grants	20.3	19.5	2.2	0.2	-	42.2
R&D Student Grants	4.3	3.4	1.1	0.5	0.0	9.4
<b>Total</b>	<b>24.6</b>	<b>23.0</b>	<b>3.3</b>	<b>0.7</b>	<b>0.0</b>	<b>51.6</b>

## Measurement Standards Laboratory Report

### Overview

- A key output for the quarter was delivering MSL's annual training courses to private sector testing and calibration laboratories.
- MSL also had significant engagement with regulators such as Civil Aviation Authority, Police, and Commerce Commission on measurement issues and new regulatory requirements.

### Financial performance

- MSL is running a small surplus for the first quarter mainly driven by an underspend in personnel costs due to vacancies, which will reduce later in the year due to other planned expenditure.

<b>Statement of revenue and expense</b>				
<b>For the three months ended 30 September 2018</b>				
<b>\$000</b>	<b>Group</b>			<b>Full Year</b>
<b>Revenue</b>	<b>Actual</b>	<b>Budget</b>	<b>Variance</b>	<b>Budget</b>
<b>Crown operating:</b>				
Strategic Investment	33	33	-	133
National Measurement Standards	1,767	1,757	10	7,069
<b>Total Crown operating</b>	<b>1,800</b>	<b>1,790</b>	<b>10</b>	<b>7,202</b>
<b>Commercial revenue</b>				
Domestic commercial	146	141	5	562
Overseas comercial	13	13	-	53
	159	154	5	615
Other income	-	-	-	15
<b>Total revenue</b>	<b>1,959</b>	<b>1,944</b>	<b>15</b>	<b>7,832</b>
<b>Expenses</b>				
Personnel	947	1,091	144	4,248
Services and contracts	129	142	13	569
Other costs	36	28	(8)	112
Depreciation	143	175	32	800
<b>Total expenses</b>	<b>1,255</b>	<b>1,436</b>	<b>181</b>	<b>5,729</b>
<b>Operating surplus</b>	<b>704</b>	<b>508</b>	<b>196</b>	<b>2,103</b>
Indirect expenses	515	501	(14)	1,903
<b>Net surplus</b>	<b>189</b>	<b>7</b>	<b>210</b>	<b>200</b>

## Use of the MSL capital appropriation

- \$335,445 of capital expenditure has been approved against the full-year appropriation of \$1.125 million.

## MSL's outputs

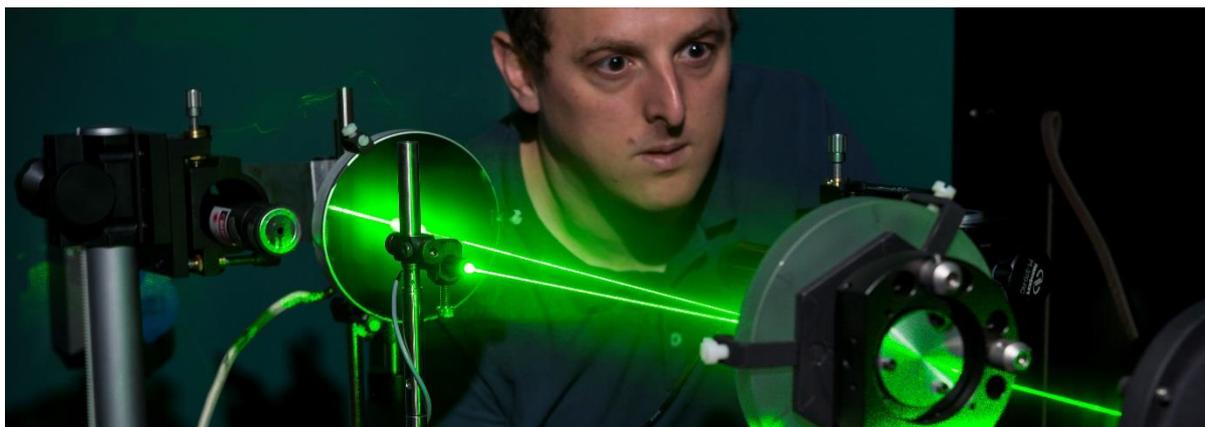
- 64 calibration jobs were delivered to customers.
- 6 IANZ assessments of external laboratories were carried out by MSL staff.
- 58 course participants received measurement training from MSL.
- The following primary measurement standards were maintained: ITS-90 Contact Thermometry Scale; High Pressure Standard Masses.

## International acceptance of New Zealand's Measurement System

- Light Standards had their 5-yearly IANZ reassessment involving a technical reviewer from Finland's National Metrology Institute. MSL had a very successful audit outcome with no corrective action requests and a new staff member achieved IANZ signatory status.
- **Section 9(2)(a)** represented New Zealand at the Consultative Committee on Photometry and Radiometry at the International Bureau of Weights and Measures (BIPM); which governs international acceptance of our measurement standards.
- **Section 9(2)(a)** assisted Japan's National Metrology Institute by acting as an international reviewer of their humidity standards.
- **Section 9(2)(a)** assisted the Myanmar Government with the establishment of their national metrology system. His work is funded by the German Government as part of their international aid to the Asia-Pacific Region.

## Actions to address resilience of MSL

- The building consent for the construction of the building envelope has been approved and the Board has approved the contract for this stage of the new MSL building.
- We informed customers and stakeholders of the upcoming closure of some MSL functions while maintenance work is carried out to remove asbestos from the McKay Building.
- 3 new FTEs have been recruited to address critical person risks and upcoming retirements.
- MSL established a new facility (new laboratory and equipment) for single photon metrology in Light Standards. Standards in this area will be important for applications aimed at more secure digital communications and better medical imaging.



Above image: Light Standards in action

## Gracefield Innovation Quarter Report

### Overview

Significant progress has been made on Gracefield during the first quarter of 2018/19, including:

- Establishment of the Gracefield Development Governance Group, to improve the level of governance as well as better co-ordinate repairs and maintenance programme with the GIQ planning team. This group is also focused on improving the maturity of construction programme management in our organisation.
- Completed the Gracefield Innovation Quarter (GIQ) Programme Business Case that outlines the long-term vision to make GIQ a world-class innovation hub. This has been presented to Government for consideration.
- Achieved resource and building consent for MSL new build and selected the main contractors as well as board sign off for the detailed business case for our new MSL building. This means construction will commence in October. This will mark the first time in thirty years a new building has been built at Gracefield.
- Developed a draft storyboard for a Shared Vision for GIQ, with the purpose of getting all internal and external stakeholders aligned as to the goals for this important government asset.
- Building the GIQ Planning team with the appointment of four Leads for Engagement, Commercial, Information and Delivery, with a further 4 staff currently being recruited.
- Organised the formation and regular gathering of the Gracefield Development Governance Group (GDGG).
- Organised the formation and regular gathering of the GIQ Engagement Group made up of 16 science and engineering staff working on-site. This group will help us as we deliver our significant site improvement programmes.
- Repairs to Robertson Roof (phase 1) as part of the Emergency Works Programme were completed.
- Our Māori economy hub which suffered storm damage now has a new roof and internal repairs complete.
- The foxpit upgrade has now been completed (deals with Glycosyn waste).

Our focus next quarter:

- Constructing the new, purpose-built facility for the Measurement Standards Laboratory (MSL) following the building consent and resource consent being received. Construction will commence in October 2018. Additionally, complete design for the interior of the new building for MSL, to enable continuity of construction.
- Other emergency response works underway at Gracefield include removal of asbestos in the McKay Building, replacement of the B Block roof and conversion of part of the Robertson café into laboratory space.
- Relocate the Protoshop workshop to make room for the expansion of the KiwiStar operations.
- Circulate the storyboard for a Shared Vision for GIQ for feedback among stakeholders.
- Filling the following outstanding roles: Workplace Designer; 3D Renderer; Graphic Designer; Project Manager.
- Conduct second Gateway Review with external knowledge experts. The focus this time is on: Feedback on GIQ PBC; Input into Shared Vision; Advice around Callaghan Innovation Customer Journey; Response to Operating Model for RTS; as well as progress made on implementing the six recommendations made by the Panel at the first Gateway in February of this year.
- Complete adoption of customised Prince2 Project Management Framework and begin using it.
- Plan and manage the move of both Auckland-based Callaghan Innovation teams into a single premise that includes an innovation showcase as well as desk spaces and laboratories. Focus is on business case sign off from the board and lease negotiations.
- Start work on Programme Business Case for GIQ Strategic Programme, which was only briefly summarised in the first GIQ Programme Business Case.

- Undergo construction of the new MSL Time lab, Glycosyn inward goods, Protoshop workshop, and KiwiStar gentry crane and workshops.
- Additionally this quarter, we will:
  - Recruit for a director on our board with property development experience.
  - Recruit for a member of the executive with property development expertise and skills to take over the implementation of our Gracefield programme of work.

### Financial Performance

- Running to budget with a project variance pending to adjust the budget for the Foxpit project to be submitted for approval by the Gracefield Development Governance Group (GDGG).

A breakdown of progress and expenditure against the Emergency Response Works is available in the following page.

# Section 9(2)(b)(ii)

**Commentary:**

The Robertson roof stage 1 has been successfully complete with 23 roof sections replaced. Replacement of the glass atriums has been deferred with focus on other priorities.

Design is complete for the new MSL building exterior, and building consent is approved.

The construction contractor for the new MSL building has been selected, and works have begun.

Design for the internal fit-out of the new MSL building is continuing, there is a time constraint to complete this design.

Design for improvements to the Hector building is complete.

Demolition work is still pending as planned.

Asbestos removal has been prioritised and a project initiated to accelerate this work prior to demolition works.

The additional site management costs to do this work separately from the demolition have been funded from baseline.